

### **REMARKS/ARGUMENTS**

Prior to this Amendment, claims 2-15 and 17-22, which are indicated as allowable in the prior Office Action, were pending in the application.

Claim 1 is amended to clarify differences between the claimed transmitting method and those taught by the cited references. Claim 14 is cancelled.

Claims 23-25 are added to provide protection for a feature of the invention not shown by the cited references. No new matter is added with support found from page 49, line 11 to page 51, line 2.

After entry of the Amendment, claims 2-13, 15, and 17-25 remain for consideration by the Examiner.

### **Claim Rejections Under 35 U.S.C. §102**

In the Office Action, claims 2-4, 10-13, 17, and 20-22 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 5,974,465 ("Wong"). This rejection is traversed based on the following remarks.

Independent claim 2 is directed to a method for transmitting packets onto a network that includes "determining a priority value for each of the at least two data sets based on priority information parsed from the received at least two data sets." It is a useful feature of the claimed method that the determination is performed in a dynamic fashion rather than simply based on pre-determined assignments, and this is explained in detail throughout Applicants' specification such as starting at the top of page 23. In one example provided by Applicants, the priority information is a cookie-like attachment at the end of a data packet that is used to aggregate or accumulate priority information with a user being given higher priority based on visiting various web pages (such as may be used to show an customer attempting to complete a sale rather than just browsing).

The determining step of claim 2 is not shown by Wong. The Office Action cites Wong at element 208 of Figure 2 for teaching this limitation. However, at this citation, Wong shows its "prioritization software module" which is described from col. 3 to col. 4, line 40 as assigning "pre-determined packet priorities" to an outbound packet "according to the application program which generated that

particular packet.” Hence, Wong fails to teach parsing priority information from a data set and then using this parsed information to determine a priority value, and claim 2 is not anticipated by Wong for at least this reason.

Further, claim 2 calls for composing a composite data set comprising portions of the at least two data sets with the amount and order of the portions from the at least two data sets based on the determined priority values. Wong fails to teach either of these features of the composing. Wong is cited at element 209 of Figure 2 for teaching this feature, but this is simply the queues used by the prioritization software module 208 for outbound packets. Wong teaches in col. 4, line 8 and on that a number of buffers within the queue 209 are reserved for each priority level with each buffer containing one packet. Then, when a packet is received for transmittal, the module 209 determines if there are available buffers for the packet based on its priority (see, for example, col. 4, line 41-57).

Wong fails to teach “composing a composite data set comprising portions of the at least two data sets” as it simply teaches storing packets in buffers or discarding the packets. There is no discussion of using portions of the received packets to compose a composite data set as called for in claim 2.

Further, Wong fails to teach the amount of data from each of the data sets is based on the determined priority value. Instead, Wong simply teaches putting a data packet in a queue when a buffer is available based on the packet’s pre-determined packet priority.

Still further, Wong fails to teach that the order of the portions of each data set is selected based on the determined priority values. Instead, Wong teaches placing each received packet in the queue 209 when buffers are available and not in any particular order. For at least these reasons, claim 2 is not anticipated by Wong, and Applicants request that this rejection be withdrawn.

Claims 3, 4, and 10-13 depend from claim 2, and they are believed allowable over Wong at least for the reasons provided for allowing claim 2. Further, claim 3 requires that the speed for the connection supplying data to each connection buffer be monitored and that the size of the buffer be adjusted to provide a buffer that is sized to hold packets received over a particular time

interval. There is no teaching in Wong of such monitoring and adjusting of buffer size. The Office Action takes Official Notice that one skilled in the art would find this to be well known. Applicants transverse this taking of Official Notice and respectfully request that the Examiner provide a specific reference that shows monitoring connection speed to a plurality of connection buffers and adjusting the size of buffers so as to be able to hold packets received over a preselected time interval. Similarly, the Examiner took Official Notice of the requirement in claim 4 that the preselected time interval of claim 3 be selected to allow completion of the composing step. Applicants traverse this taking of Official Notice. Wong actually teaches away from the limitations of claim 3 and 4 as it teaches assigning a set of buffers in a queue and then, if the buffers are not available for received packets based on their priority, discarding the outbound packets and sending notification. Hence, claims 3 and 4 are believed allowable as a proper anticipation rejection has not been stated by the Office Action.

Independent claim 17 is directed to a system for transmitting packets from a buffer. In the system of claim 17, packets are stored in a buffer and each has a priority value. Significantly, a priority value is provided for each packet "that at least partially determines a queue order for transmitting." The system also includes a transmitter to transmit prioritized packets from the buffer. The buffer is provided on an intermediary web server that receives packets from one or more clients.

Wong fails to anticipate each and every element of claim 17. First, Wong fails to teach that each packet in its buffers has a priority value and that this value is used to set the queue order for transmitting. The Office Action cites Wong at col. 4, lines 1-12 for teaching this element of claim 17. However, at this citation and elsewhere, Wong teaches that for each of a number of priority levels, "the software module 208 specifies a number of buffers within queue 209." There is no discussion of "queue order" and as a result, Wong does not support a rejection of claim 17. This construction is further supported by the teaching of Wong beginning at col. 4, line 41 which implies that each received packet is processed as it is received and it is not buffered unless its priority indicates there is space in one of the reserved buffers. Hence, Wong does not

teach storing a plurality of packets in a buffer and then transmitting in an order based on their priority but instead teaches buffering packets only if buffers are available with unbuffered packets being discarded and not sent. For these reasons, Applicants request that the rejection of claim 17 based on Wong be withdrawn.

**Rejection of Claims Under 35 U.S.C. §103**

In the Office Action, claims 5, 6, 18, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wong in view of U.S. Pat. No. 6,510,158 ("Robotham"). This rejection is traversed based on the following remarks.

Claims 5 and 6 depend from claim 2, and Robotham fails to overcome the deficiencies of Wong as discussed with reference to claim 2. Further, claim 5 calls for weight values for each data set to be determined and used for selecting portions of the data set to include in a composite data set. Robotham is cited for teaching the limitations for claim 5. However, no specific citation was provided in the Office Action, and Applicants request that a specific citation be provided to allow this rejection to be properly addressed or the rejection withdrawn.

Claim 6 calls for "organizing the connection buffers into logical rings of like priority." This feature is not taught by Wong – as is indicated in the Office Action. The Office Action, however, indicates that Robotham teaches this limitation in its Abstract. The Abstract states that the "logical buffer de-queuing information corresponds to an access sequence for a plurality of logical ring buffers that are comprised of the buffers, or buffer identifiers." However, this does not teach or suggest organizing connection buffers into logical rings of like priority (i.e., where does Robotham teach that it uses the priority information to place its virtual circuits in a logical ring that only includes buffers of like priority?). Claim 6 then states that the portions of data are selected for inclusion in the composite data set at a frequency at least partially reflecting the relative priority of the rings. This aspect allows data in like priority buffers to be included in the composite data set at a frequency based on frequency (e.g., by rotating the ring of buffers as discussed at step 606 of Fig. 6). Robotham fails to teach this in the Abstract

as asserted by the Examiner. For these additional reasons, claim 6 is believed allowable over the combined teaching of Wong and Robotham.

Claims 18 and 19 depend from claim 17 and are believed allowable over Wong for the reasons provided for allowing claim 17. Claim 18 includes limitations somewhat similar to claim 5 and hence, the reasons for allowing claim 5 over Robotham are applicable to claim 5. Specifically, Applicants request that a specific citation be provided to Robotham or the rejection be withdrawn as unsupported.

Claim 19 was rejected for the same reasons as claim 6, but claim 19 calls for a very different limitation. Specifically, claim 19 states "wherein the priority value is at least partially determined by the number of transmission cycles each of the at least two packets has remained in the buffer." This feature allows a data packet to have its priority value be adjusted if it has not been transmitted for one or more cycles (e.g., to increase the fairness of the transmission system by better insuring that initially lower priority packets will eventually be transmitted as their priority is determined based on cycles spent in the buffer). No citation is provided in the Office Action for this limitation of claim 19, and hence, a prima facie case of obviousness has not been presented by the Patent Office.

Further, in the Office Action, claims 14 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of U.S. Pat. No. 6,386,052 ("McCloghrie"). Claim 14 is cancelled. Claim 15 depends from claim 2 and is believed allowable over Wong for the reasons provided for claim 2. McCloghrie fails to overcome the deficiencies of Wong with reference to claim 2.

Still further, claims 7-9 were rejected as being unpatentable over Wong in view of Robotham and further in view of U.S. Pat. No. 6,112,267 ("McCormack"). Claims 7-9 depend from claims 2 and 6 and are believed allowable over Wong and Robotham for the reasons provided for claims 2 and 6. McCormack fails to overcome these deficiencies of Wong and Robotham discussed for claims 2 and 6. Further, Applicants disagree with the teaching provided by McCormack. The Office Action states that the teaching in McCormack at col. 6, lines 56-65 teaches all the limitations of claim 7 and claim 8. However, no citation for the limitation of claim 8 is provided, and hence, the Office Action fails to state a

prima facie case of obviousness for this claim. Further, McCormack at the citation only discusses how the length of a ring buffer can be determined by its beginning and tail register addresses. There is no discussion of determining the number of bytes held by connection buffers in a ring, determining that data is contained that is waiting to be sent, and then based on these two steps determining a number of bytes to be sent from each of a number of logical rings. For these additional reasons, claims 7 and 8 are believed allowable over these 3 references.

Claim 9 is rejected based on the taking of Official Notice (or a design choice). The Applicants traverse this rejection and request that a specific citation be provided that teaches that the selecting of sub-packets from each of the rings be done to provide a particular selection pattern. This is a unique portion of the invention that defines how a composite data set is formed and is not believed to be found in the prior art (or to simply be a design choice). For this additional reason, claim 9 is believed allowable over the cited references.

### **Conclusion**

In view of all of the above, the case in condition for allowance which action is respectfully requested.

A fee is provided for the request for an extension of time. No additional fee is believed to be required by this response. However, should any fee be required please charge Deposit Account 50-1123.

Respectfully submitted,



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